Demand Responsive Transit Center(s)

AM

MUSA

AUA

4.2.1.004	A list of authorized users shall be created, stored, updated and deleted for Ride Matching and Reservations Service.	Derived
4.2.1.004.a	A list of authorized providers shall be created, stored, updated and deleted for the Ride Matching and Reservations Service.	Derived
4.2.1.009	A user profile shall be created, stored, updated and deleted for each user of the Ride Matching and Reservations Service.	Derived
4.2.1 .011	A user profile shall contain user account information.	Derived
4.2.1.012	A user profile shall contain service profile(s) for each service.	Derived
4.2.1.013	A user profile shall contain distribution profile(s) for each service.	Derived
4.2.1.014	User profile data shall be accepted into the system manually.	Derived
4.2.1.015	User profile data shall be accepted into the system electronically (standard format).	Derived
4.2.1.016	User profile data shall be accepted into the system electronically (Non-standard format).	Derived
4.2.1.016-a	All user profile data shall be checked for validity.	Derived
4.2.1.017.a	Users shall be allowed to store up to (TBD) distribution profiles per user profile.	Derived
4.2.1.018	A master user profile shall be created, stored, updated and deleted for each registered user.	Derived
4.2.1.019	A user profile shall be able to be activated and deactivated via an activation/deactivation request.	Derived
4.2.1.020	A user profile shall be able to be created, stored, updated, and deleted.	Derived
4.2.1.021	User account information shall include account number (assigned by the system).	Derived

4.2.1.021.a	User account information shall include a Personal Identification Number (PIN).	Derived
4.2.1.022	User account information shall include user/company name.	Derived
4.2.1.023	User account information shall include mailing address.	Derived
4.2.1.024	User account information shall include phone number.	Derived
4.2.1.024.a	User account information shall include a fax number.	Derived
4.2.1.024.b	User account information shall include a computer address.	Derived
4.2.1.025	User account information shall include user list (for multiple user accounts, like a company account).	Derived
4.2.1.026	User account information shall include credit card name(s), number(s), expiration date(s).	Derived
4.2.1.027	User account information shall include financial institution name(s), account number(s).	Derived
4.2.1.027.a	User account information shall include financial institution mailing address.	Derived
4.2.1.027.b	User account information shall include a financial institution computer address.	Derived
4.2.1.027.c	User account information shall include user account balance.	Derived
4.2.1 .027 .d	Users shall be allowed to query user account information.	Derived
4.2.1.027.e	User account information shall be validated with a financial institution via an account validation request.	Derived
4.2.1.027.f	An account validation shall be received from a financial institutuion via an account validation notice.	Derived
4.2.1.046	Ride Matching and Reservations Service profile data shall include origin/destination points.	Derived
4.2.1.047	Ride Matching and Reservations Service profile data shall include arrival time(s).	Derived
4.2.1.048	Ride Matching and Reservations Service profile data shall include departure time(s).	Derived

		Source
4.2.1.049	Ride Matching and Reservations Service profile data shall include travel mode.	Derived
4.2. I .050	Ride Matching and Reservations Service profile data shall include special needs.	Derived
4.2.1.055	A service profile shall be created, stored, updated, and deleted.	Derived
4.2.1.056	A service profile shall be able to be activated and deactivated via an activation/deactivation request.	Derived
4.2.1.057	Distribution profile data shall contain the user-specific parameters, needed to transmit information from a given service to the user, including notification device (eg.; phone, fax, computer).	Derived
4.2.1.058	Distribution profile data shall contain notification address (eg.; phone/fax number, computer id and address).	Derived
4.2.1.059	Distribution profile data shall contain user type (to support prioritization of delivery where applicable).	Derived
4.2.1.059.a	A distribution profile shall be able to be activated/deactivated via an activation/deactivation request.	Derived
4.2.1.060	Distribution profile data shall be created, stored, updated, and deleted.	Derived
4.2.1.060.a	A profile confirmation shall be sent to each user registered for a service to confirm their registration.	Derived
4.2.1.060.b	A profile confirmation shall be sent to each user registered for a service to verify the correctness of the information contained in their user profile.	Derived
4.2.1.061	A provider profile shall be created, stored, updated, and deleted for each rideshare service provider.	Derived
4.2.1.062	Provider profile data shall be accepted into the system manually.	Derived
4.2.1.063	Provider profile data shall be accepted into the system electronically (standard format).	Derived
4.2.1.064	Provider profile data shall be accepted into the system electronically (non-standard format).	Derived

4.2.1.065	Provider profile information shall include provider identification number (assigned by the system).	Derived
4.2.1.065.a	Provider profile information shall include provider name.	Derived
4.2.1.065.b	Provider profile information shall include mailing address.	Derived
4.2.1.065.c	Provider profile information shall include phone number.	Derived
4.2.1.065.d	Provider profile information shall include fax number.	Derived
4.2. I .065.e	Provider profile information shall include computer address.	Derived
4.2.1.065.f	Provider profile information shall include vehicle type(s).	Derived
4.2.1.065.g	Provider profile information shall include vehicle(s) seating capacity.	Derived
4.2.1.065.h	Provider profile information shall include vehicle(s) information (make, model, color).	Derived
4.2.1.065.i	Provider profile information shall include vehicle(s) license number.	Derived
4.2.1.065.j	Provider profile information shall include driver name(s).	Derived
4.2.1.065.k	Provider profile information shall include safety certification information.	Derived
4.2.1.066	A master provider profile shall be created, stored, updated and deleted for each rideshare service provider.	Derived
4.2.1.066.a	Provider profile information shall be validated with external information sources (e.g., DMV for moving violations, etc.)	Derived
4.2.1.067	A list of authorized providers shall be created, stored, updated and deleted for the Ride Matching and Reservations Service.	Derived
4.2.1.067.a	A profile confirmation shall be sent to each Ride Matching and Reservations Service provider to confirm their registration.	Derived
4.2.1.067.b	A profile confirmation shall be sent to each Ride Matching and Reservations Service provider to verify the correctness of the information contained in their provider profile.	Derived

Component				Source
Service	**Function**	**Sub-Function**	**Requirement**	
MSU				
		4.2.2.004	Service usage data shall be collected for Ride Matching and Reservations Service.	Derived
		4.2.2.012	Service usage data collected for Ride Matching and Reservation shall include ride completetion data, including date and time of each service usage and service options used.	Derived
		4.2.2.013	Service usage data collected for Ride Matching and Reservation shall include a passenger list.	Derived
		4.2.2.026	Service usage statistics shall be compiled based on analysis of service usage data over time.	Derived
		4.2.2.027	Service usage statistics shall be compiled for usage by individual account.	Derived
		4.2.2.028	Service usage statistics shall be compiled for usage levels for each service.	Derived
		4.2.2.029	Service usage statistics shall be compiled for usage for each pricing structure within a service.	Derived
		4.2.2.030	Service usage statistics shall be created, stored, updated and deleted.	Derived
SBP				
		4.2.3.004	Service invoices shall integrate charges for many transportation modes and services including Ride Matching and Reservations Service.	USR 3.1.4,3.1.4.1,3.1.4
		4.2.3.009	A service invoice shall be compiled for each user account based on the service usage data and service pricing structures.	Derived
		4.2.3.010	Third party billing (for companies or other groups of users under a single account) shall be supported.	USR 2.3.3.3, 3.1.1.5, 3.1
		4.2.3.011	Periodic billing (eg. monthly, quarterly, etc) shall be supported.	Sbus 56-5
		4.2.3.015	Service payments shall include payment for Ride Matching and Reservations Service.	SR 3.1.4.4, GGO 13.5.2,
		4.2.3.015.a	Rideshare payments shall be made to Rideshare Service Providers.	Derived
		4.2.3.021	Service payments shall be accepted via credit card transactions.	USR 2.4.3.1, 3.1.0, 3.1.1
		4.2.3.023.a	Service payments shall be accepted via electronic funds transfers from financial institutions.	Derived

Component				Source
Service	**Function**	**Sub-Function**	**Requirement**	
		4.2.3.025	A single payment media shall be supported for all transportation services.	USR 3.1.2.1
		4.2.3.026	A single payment media shall be supported for transportation services and other uses, such as retail purchases, utility bills, etc.	USR 3.1.2.6
		4.2.3.027	A payment confirmation shall be sent to each user.	USR 3.1.1.3
		4.2.3.029	Service payments that are insuffkient or past due shall be detected.	Derived
		4.2.3.030	A delinquent account notice shall be sent to users with overdue or insufficient payments.	Derived
	PSPS			
	MPR			
		4.1.1.001	Pricing requirements shall be collected from public agencies.	Derived
		4.1.1.002	Pricing requirements shall be collected from travelers.	Derived
		4.1.1.003.a	Pricing requirements shall be collected, stored, and updated to support pricing strategy and pricing structure planning activities.	Derived
		4.1.1.004	Service usage statistics shall be assessed to determine additional requirements.	Derived
	MPS			
		4.1.2.004	Pricing strategies shall support incentive programs (eg. favor certain transportation modes, routes or user groups).	USR3.1.4.3,3.1.5.2,3.1
		4.1.2.005	Pricing strategies shall be created, stored, updated and deleted.	Derived
	MSPS			
		4.1.3.004	Service pricing structure(s) shall be established for Ride Matching and Reservation pricing.	Derived
		4.1.3.010	Service pricing structures, that implement pricing requirements and pricing strategies, shall include monthly price options.	Derived
		4.1.3.011	Service pricing structures, that implement pricing requirements and pricing strategies, shall include per use price options.	Derived

					Source
			4.1.3.013	Service pricing structures, that implement pricing requirements and pricing strategies, shall include discounts.	Derived
			4.1.3.016	Service pricing structures, that implement pricing requirements and pricing strategies, shall include fixed fares (for Public Transit).	USR 3.1.2.2
			4.1.3.017	Service pricing structures, that implement pricing requirements and pricing strategies, shall include variable prices (for Public Transit and roadways).	USR3.1.2.2,3.1.5.1.1
			4.1.3.017.a	Service pricing structures, that implement pricing requirements and pricing strategies, shall include transit fares based on transit routes.	Derived
			4.1.3.019	Service pricing structures shall be created, stored, updated and deleted:	Derived

IM

MIRP

CRI

			6.2.3.001	Incidents shall be classified based on incident data.	GGO 20.10.1
			6.2.3.002	Incidents shall be classified according to standard catagories. (Rational: Requirements specify a wide range of classifications which are covered by this standard e.g., HAZMAT chemical spills, breakdown/disable vehicle, accidents within injuries, major events).	USR 5.1.2.2.3, 5.1_1.1,4
			6.2.3.003	Incident reports for each incident shall be retained in an incident file.	Derived

DAI

			6.2.I.001	Incidents shall be detected and incident data collected for planned (predicted) incidents.	USR 1.7.1, 1.7.1.1, 1.7.1
			6.2.1.002	Incidents shall be detected and incident data collected for unplanned incidents.	USR 1.7.1, 1.7.1.2,4.5.1
			6.2.1.004	Incidents shall be detected using incident data collected from media sources.	USR 1.7.1.1.1, 1.7.1.2.1
			6.2.1.005	Incidents shall be detected using incident data collected from weather information sources.	USR 1.7.1.1.1, 1.7.1.2.1
			6.2.1.006	Incidents shall be detected using incident data collected from public transit and other transportation providers.	USR 1.7.1.1.1, 1.7.1.2.1,
			6.2.1.014	Incidents shall be detected using incident data collected via telephone.	USR 2.4.4.1

6.2.1.018	Incident data shall include type of incident classification.	USR 1.7.1.1.2, 1.7.1.2.2,
6.2.1.019	Incident data shall include location.	USR 1.7.1.1.2, 1.7.1.2.2,
6.2.1.020	Incident data shall include severity.	USR 4.5.1.2
6.2.1.021	Incident data shall include time of occurrence.	USR 4.5.1.2
6.2.1.026	Incident detection shall be available 24 hours/day, 7 days/week.	Derived

IRPPR

6.2.4.001	Response plans and response procedures shall be selected and implemented based on the most current incident data.	USR 1.7.3, 1.7.3.1,4.5.2
6.2.4.002	Response plans and response procedures shall provide for coordination of all responding agency activities at the incident scene pertaining to patient care.	MnA 3.2.1
6.2.4.004	Response plans and response procedures shall provide for coordination of all responding agency activities at the incident scene pertaining to incident clearing and removal.	MnA 3.2.1
6.2.4.005	Resource requests shall be sent to the appropriate agencies based on the response plans and response procedures that have been selected to resolve the incident.	Derived
6.2.4.006	A resource request shall contain, the most current incident data.	Derived
6.2.4.009	A travel conditions request shall be generated to request travel conditions information along a primary or alternate response route.	Derived
6.2.4.010	Response routes shall be selected based on the most current incident data and tailored travel conditions for that response route.	USR 5.2.2.2
6.2.4.01I	Emergency response vehicles and personnel shall be advised of travel conditions along the response route. (Rationale: reduce response time to an incident by helping emergency vehicles avoid delays due to travel conditions).	Derived
6.2.4.015	A resource cancellation shall be issued for any incident response resource that is no longer needed to respond to an incident.	Derived

MIL

Component					Source
Service	**Function**	**Sub-Function**	**Requirement**		
		6.2.6.001	Incident log reports shall be generated based on data stored in the incident log.		MnA 3.4.5
		6.2.6.002	Incident log reports shall be generated based on user defined criteria for one or more incidents to support key stakeholder agencies.		MnA 3.4.1, 3.2.2,3.3
		6.2.6.004	Incident information shall be accessable by mobile data terminals.		MnA 3.4.3,3.4.4
		6.2.6.004.a	Incident information shall be accessable by agency computers.		Derived
		6.2.6.005	Incident history information shall be generated from incident reports and incident tiles contained in the incident log. (Rationale: This information will be used for analysis purposes to determine if changes are needed to existing response plans, procedures and routes, or if a new response pan, procedure or route needs to be developed.).		MnA 3.4.5, USR 1.7.2
		6.2.6.006	Incident conditions shall be generated based on incident data and incident response status.		USR 1.7.3.3, Derived
		6.2.6.012	Incident conditions shall identify type of incident.		Derived
		6.2.6.013	Incident conditions shall identify location.		USR 4.5.1.2
		6.2.6.014	Incident conditions shall identify severity (e.g. number of lanes blocked or other factors that would require traffic rerouting).		Derived
		6.2.6.015	Incident conditions shall identify time of occurrence.		USR 4.5.1.2
		6.2.6.016	Incident conditions shall identify estimated time until incident cleared.		Derived
		6.2.6.018	Incident information shall be retained for TBD years.		Derived
		6.2.6.019	Incident information and shall be provided on a need-to-know basis.		Derived
	TRP				
		6.2.5.001	Incident response status shall include estimated time of arrival of responding resources.		MnE 5.2,5.2.2
		6.2.5.002	Incident response status shall include current step in the response procedure.		Derived
		6.2.5.003	Incident response status shall include estimated time to removal and clearing of incident.		USR 1.7.1.2.2

		6.2.5.006	Estimated time of arrival shall be sent to mayday service users, people who have reported incidents, and agencies participating in the incident response until the responding resource arrives at the scene.	MnE 5.2.1
		6.2.5.007	Incident response status shall be monitored and updated continuously until an incident is closed.	USR 1.7.1.2.2
		6.2.5.009	Incident response status for each incident shall be stored and maintained in the incident log.	Derived
MIRS				
	MIRA			
		6.3.1.006	Resource assignments shallbe used to manage assignment of public transit (e.g. when large numbers of people need to be transported) resources, from multiple agencies and multiple jurisdictions.	GGO 2 1.5.4, USR 2.4.4.
		6.3.1.007	Resource assignments shall include vehicle assignments.	USR 5.2.1
		6.3.1.008	Resource assignments shall include personnel assignments.	Derived
		6.3.1.009	Resource assignments shall include equipment assignments.	Derived
		6.3.1.010	Vehicle assignments shall include jurisdictional assignment of vehicles to facilities and districts (e.g. fire station).	Derived
		6.3.1.011	Vehicle operational assignments shall include assignment of vehicles to incidents, patrols, maintenance, or training.	USR 1.7.2.2, 1.7.2.3
		6.3.1.012	Vehicle assignment status shall be maintained for each vehicle.	Derived
		6.3.1.013	Personnel assignments shall include capability of assignment of personnel to vehicles.	Derived
		6.3.1.014	Personnel assignments shall include jurisdictional assignment of personnel to facilities and districts (e.g. fire station).	Derived
		6.3.1.015	Personnel assignments shall include operational assignment of personnel to available, incidents, training, or other.	Derived
		6.3.1.016	Personnel assignment status shall be maintained for each individual.	Derived

			Source
6.3.1.017	Equipment assignments shall include assignment of equipment to vehicles.		Derived
6.3. .018	Equipment assignments shall include jurisdictional assignment of equipment to facilities and districts (e.g. fire station).		Derived
6.3.1.019	Equipment assignments shall include assignment of equipment to personnel.		Derived
6.3.1.020	Equipment assignment status shall be maintained for each piece of equipment.		Derived
6.3.1.021	Equipment assignments shall include operational assignment of equipment to available, incidents, maintenance, or training.		Derived
6.3.1.022	Resource assignments for each incident shall be determined based on a resource request, resource status, resource assignment status, and resource location.		MnA 3.4,3.4.2, 3.5.1, U
6.3.1.022.a	When required resources are unavailable to be assigned to incidents, incidents will be queued until appropriate resources become available.		Derived
6.3.1.023	A resource request shall be sent to Public Transit Fleet Management when transportation for large numbers of people is required during an incident.		USR 2.4.4.3
6.3.1.029	Upon receipt of a resource cancellation or incident completion notice, resource assignments shall be updated to indicate that responding vehicle(s), personnel and equipment are available to be reassigned to other incidents.		MnA 3.4.2
6.3.1.030	When incident response status indicates that an incident per response plans and procedures is closed, resource assignments shall be updated to indicate that responding vehicle(s), personnel and equipment are available to be reassigned to other incidents.		MnA 3.4.2
6.3.1.031	Upon receipt of a maintenance request for preventative maintenance on a vehicle, vehicle assignments shall allocate the vehicle to a maintenance garage if the vehicle is not currently assigned to an incident or assigned as a backup to another vehicle that is assigned to an incident.		Derived
6.3.1.032	Upon receipt of a maintenance completion notice, the vehicle shall be reassigned to its facility.		Derived
6.3.1.033	Upon receipt of a maintenance request for preventative maintenance on a piece of equipment, equipment assignments shall allocate the equipment to maintenance if the equipment is not currently assigned to an incident or assigned as a backup to other equipment that is assigned to an incident.		Derived

		6.3.1.034	When vehicle status indicates that a vehicle is not operable, the failed vehicle will be assigned to a maintenance garage.	Derived
		6.3.1.035	When vehicle status indicates that a vehicle is not operable, the appropriate maintenance equipment and personnel shall be assigned to the failed vehicle's location.	Derived
		6.3.1.036	When vehicle status indicates that a vehicle is not operable, an available replacement vehicle shall be assigned to replace the disabled vehicle, if the disabled vehicle was assigned to an incident.	Derived
		6.3.1.037	When a maintenance completion notice is received for a vehicle the vehicle shall be made available for operational assignment.	Derived
		6.3.1.037.	When a maintenance completion notice is received, the vehicle status shall indicate the vehicle is operable.	Derived
		6.3.1.038	Vehicle condition shall include accumulated mileage.	Derived
		6.3.1.039	Vehicle condition shall include driver reported problems.	Derived
		6.3.1.040	When equipment status indicates that a piece of equipment is inoperable, the failed equipment will be assigned to maintenance.	Derived
		6.3.1.041	When equipment status indicates that a piece of equipment is inoperable, appropriate maintenance equipment and personnel shall be assigned to the failed equipment's location (if necessary).	Derived
		6.3.1.042	When equipment status indicates that a piece of equipment is inoperable, available replacement equipment shall be assigned to replace the disabled equipment if the original equipment had been assigned to an incident.	Derived
		6.3.1.043	When a maintenance completion notice is received on repaired equipment, the equipment status shall indicate operable.	Derived
		6.3.1.044	Equipment condition shall include accumulated hours of usage.	Derived
		6.3.1.045	Equipment condition shall include operator reported problems.	Derived

	6.3.1.046	When a maintenance completion notice is received, the equipment assignment shall be made available for operational assignment.	Derived
	6.3.1.047	When a training request is received, incident response personnel shall be scheduled for a training/certification course if they are not assigned to an incident of if they are not assigned as back-up to other personnel.	Derived
	6.3.1.048	When a training completion notice is received, personnel will be made available for operational assignment.	Derived
	6.3.1.049	Resource assignments shall be stored and maintained.	USR5.2.1.1,5.2.2.1,5.2
TIRS			
	6.3.2.001	Resource location shall be determined.	MnA 3.5,3.5.1, USR 1.7
	6.3.2.003	Resource location shall be determined to an accuracy of +/- (TBD) meters.	Derived
	6.3.2.004	Resource location shall be continuously monitored and reported.	MnE 5.2, GGO 2 1.5.1
	6.3.2.004.a	Resource location reporting shall be tailorable to the needs of resource managers (e.g. resource owners, dispatch personnel, and on-scene coordinators).	MnE 5.2, GGO 2 1.5.1
	6.3.2.005	The resource managers (e.g. on scene incident coordinator, the dispatching agency, and the resource owner) shall be alerted when any vehicle condition or equipment condition information indicates a problem.	Derived
	6.3.2.006	Resource status shall include vehicle status.	Derived
	6.3.2.007	Resource status shall include equipment status.	Derived
	6.3.2.008	Resource location shall include vehicle location.	Derived
	6.3.2.009	Resource location shall include personnel location.	Derived
	6.3.2.010	Resource location shall include equipment location.	Derived

PIR

MRPP

6.1.2.001	Response plans and response procedures shall be developed based on the analysis of response requirements and incident history information.	MnA 4.53, MCTO 4/24/
6.1.2.002	Response plans and response procedures shall be developed to handle each incident in a manner that minimizes response time.	USR 1.7.2, MnA 3.4.2,
6.1.2.003	Response plans and response procedures shall be developed to handle each incident in a manner that assigns the correct personnel, vehicles and equipment.	USR 1.7.2, 1.7.3, 1.7.2.2
6. I .2.004	Response plans and response procedures shall be developed to handle each incident in a manner that establishes a command structure to coordinate responding agencies.	USR 1.7.2, MnA 3.2.1,
6.1.2.005	Response plans and response procedures shall be developed to handle each incident in a manner that minimizes time required to clear an incident.	USR 1.7.2, MnA 3.1.3
6.1.2.006	Response plans shall define the appropriate personnel, vehicles and equipment that are needed to respond to a specific incident based on the type of incident.	USR 1.7.2, 1.7.2.2, **1.7.2**
6.1.2.007	Response plans shall define the appropriate personnel, vehicles and equipment that are needed to respond to a specific incident based on the location of incident.	USR 1.7.2, 1.7.2.2, 1.7.2
6.1.2.008	Response plans shall define the appropriate personnel, vehicles and equipment that are needed to respond to a specific incident based on the severity of incident.	USR 1.7.2, 1.7.2.2, **1.7.2**
6.1.2.009	Response procedures shall define the specific actions, including data that shall be recorded in the incident tile, that need to be performed to resolve a specific type of incident.	USR 1.7.2
6.1.2.010	Response plans and response procedures shall be developed for traffic accident incidents.	USR 1.7.2, 1.7.2.1
6.1.2.011	Response plans and response procedures shall be developed for transit accident incidents.	USR 1.7.2, 1.7.2.1
6.1.2.012	Response plans and response procedures shall be developed for HAZMAT incidents.	USR 1.7.2, 1.7.2.1
6.1.2.013	Response plans and response procedures shall be developed for breakdown incidents.	USR 1.7.2, 1.7.2.1
6.1.2.014	Response plans and response procedures shall be developed for fire incidents.	USR 1.7.2, 1.7.2.1
6. I .2.015	Response plans and response procedures shall be developed for medical emergency incidents.	USR 1.7.2, 1.7.2.1

6.1.2.016	Response plans and response procedures shall be developed for planned event (construction, parades, sports or other special events) incidents.	USR 1.7.2, 1.7.2.1
6.1.2.017	Response plans and response procedures shall be developed for hazardous situation incidents (eg. reported drunk driver,road hazard, etc.).	USR 1.7.2, 1.7.2.1, MnE
6.1.2.018	Response plans and response procedures shall be developed for terrorist incidents.	USR 1.7.2, 1.7.2.1,2.4.4
6.1.2.019	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving state/local police.	MnA 3.1.1,3.4.2, USR 2
6.1.2.020	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving emergency medical services.	MnA 3.1.1,3.4.2, USR 2
6.1.2.021	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving fire departments.	MnA 3.1.1,3.4.2, USR 2
6.1.2.022	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving HAZMAT teams.	MnA 3.1.1, 3.4.2, USR 2
6.1.2.023	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving towing services.	MnA 3.1.1,3.4.2, USR 2
6.1.2.024	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving TMC.	MnA 3.1.1, 3.4.2, USR 2
6.1.2.025	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving highway maintenance.	MnA 3.1.1,3.4.2, USR 2
6.1.2.026	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving state and/or local transportation officials.	MnA 3.1.1,3.4.2, USR 2
6.1.2.027	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving environmental protection agencies.	MnA 3.1.1, 3.4.2, USR 2
6.1.2.028	Response plans and response procedures shall be updated based on response requirements changes and improvements identified from incident history analyses.	USR 1.7.2, MCTO 4/24/
6.1.2.029	Response plans and response procedures shall be stored and maintained.	Derived

Component				Source
Service	**Function**	**Sub-Function**	**Requirement**	

		6.1.2.030	Measures of effectiveness data shall be collected to support improvements on incident management plans.	Derived

MRR

		6.1.1.001	Response requirements shall be collected, stored and maintained to support incident and emergency response planning activities.	USR 4.4.5.2
		6.1.1.002	Response requirements shall reflect the needs of key stakeholder agencies (e.g. Police(including Transit Police), Fire , Emergency Medical, MnDOT, TMC, road maintenance, Highway Helper, environmental (e.g. HAZMAT teams, etc.)).	Derived
		6.1.1.003	Response requirements shall reflect the needs of counties, cities and state.	Derived
		6.1.1.004	Response requirements shall reflect the needs of travelers/citizens.	Derived

MRRO

		6.1.3.001	Response routes shall be developed based on the analysis of response requirements and incident history information.	MnA 4.5.3
		6.1.3.002	Response routes shall be developed in a manner that minimizes the travel time required to respond to an incident.	MnA 3.4.2
		6.1.3.003	Response routes shall be updated based on response requirements changes and improvements identified from incident history analyses.	USR 1.7.2
		6.1.3.004	Response routes shall be stored and maintained.	USR 5.2.3.1

RMR

    DRO

DRS

		8.3.2.001	Real-time demand responsive dispatch shall be provided to allow paratransit and other passengers to schedule requests for same-day trips.	GGO 11.5.1, MnA 6.1.2,
		8.3.2.002	Upon receipt of a DEMAND RESPONSIVE REQUEST, the vehicle driver shall be contacted in real-time to determine if the driver will accept the request.	USR 1.4.1.4, 2.3.2.9, 2.3
		8.3.2.003	If the vehicle driver does not respond to the DEMAND RESPONSIVE REQUEST within (TBD) minutes, the DEMAND RESPONSIVE RESPONSE shall indicate "denied".	USR 1.4.1.4,2.3.2.9,2.3

8.3.2.004	If the vehicle driver responds to the DEMAND RESPONSIVE REQUEST within (TBD) minutes, the DEMAND RESPONSIVE RESPONSE shall indicate the driver's response.	USR 1.4.1.4,2.3.2.9,2.3
8.3.2.005	If the demand responsive response is "confirmed", the modified vehicle manifest shall be sent to the vehicle driver.	USR 1.4.1.4,2.3.2.9,2.3

RSA

8.3.3.001	Rideshare vehicle location shall be determined automatically.	USR 2.3.3.1.a
8.3.3.002	Rideshare vehicle location shall be determined to an accuracy of =/- (TBD) meters.	USR 2.3.3.2
8.3.3.003	VEHICLE PARAMETERS including rideshare vehicle location shall be reported to the rideshare fleet management facility.	USR 2.3.3.2
8.3.3.004	Schedule adherence information shall be maintained to support real time schedule adjustments, and to provide status information for customer service.	USR 2.1.2.2.5, 2.3.3.2
8.3.3.005	Schedule adherence information shall be reported as necessary to notify passengers that the rideshare vehicle arrival is imminent.	USR 2.3.1.4
8.3.3.006	A scenario for returning a vehicle to schedule adherence shall be determined.	USR 2.1.1.2.2, 2.3.3.2
8.3.3.007	A capability to dispatch taxicabs to pick-up rideshare participants shall be provided to enable a late ridesharing vehicle to regain schedule adherence.	GGO 11.5.2
8.3.3.008	Corrective instruction vehicle commands shall be automatically issued to the vehicle drivers.	USR 2.1.1.2.1.4,2.3.3.2
8.3.3.009	Corrective instruction vehicle commands shall include a) changes in stops and b) route corrections including rerouting around incidents and congestion.	USR 2.1.1.2.1.4
8.3.3.010	Fleet vehicles shall arrive/depart within (TBD) minutes of the published schedule.	USR 2.3.3.2
8.3.3.011	A capability to delay connecting vehicle departures shall be provided when travelers with connecting rides are late.	Derived
8.3.3.012	Travelers shall be notified if they missed a travel connection.	Derived
8.3.3.013	A TRAVEL CONDITIONS REQUEST shall be established for each transit route to enable the collection of TRAVEL CONDITIONS along the route.	Derived

	8.3.3.014	TRAVEL CONDITIONS shall be monitored to determine when traffic could cause a schedule deviation along a route.	Derived

RSU

8.3.1.001	RIDESHARE COMPLETIONS data including passenger trip origin and pick-up time shall be collected and stored as service usage data.	USR 1.4.3.5, 1.4.3.6,2.3
8.3.1.002	RIDESHARE COMPLETIONS data including passenger trip destination and drop-off time shall be collected and stored as service usage data.	USR 1.4.3.5, 1.4.3.6,2.3

RSO

DTSPI

8.1.5.001	Rideshare provider information reports shall be generated as needed by rideshare transporation providers.	USR 1.4.2.3
8.1.5.002	Rideshare provider information vehicle manifests shall be generated daily for each rideshare vehicle.	Derived

MRP

8.1.2.001	Rideshare matching of riders to providers shall be provided.	GGO 4.5.2,4.5.4,4.10.3
8.1.2.002	When a rideshare request for a future date is received, the available rideshare offers shall be filtered to determine rideshare information (i.e. a list of rideshare options and provider profile information) that meet the trip criteria.	USR 1.4.1.3, 1.4.3.1, SB
8.1.2.003	When a rideshare request for the current date is received, the available rideshare offers shall be filtered and combined with vehicle location to determine rideshare information (i.e. a list of rideshare options and provider profile information) that meet the trip criteria.	USR 1.4.1.3, 1.4.3.1, SB
8.1.2.004	If no available rideshare offers meet the rideshare request trip criteria, the request shall be waitlisted for the next rideshare route plan determination.	ASIS
8.1.2.005	When a rideshare request for a selected option is received, a seat on the selected vehicle shall be reserved for the requester.	USR 2.3.2.5, GGO 4.10.
8.1.2.006	When a rideshare request for a selected option on a future date is received, rideshare information that indicates a reserved seat shall be sent to the requestor via the Manage Rideshare Requests subfunction.	USR 2.3.2.5, GGO 4.10.

8.1.2.007	When a rideshare request for a selected option on the current day is received, a demand responsive request shall be sent to determine if the provider can accept the added passenger.	USR 2.3.2.10
8.1.2.008	When a "confirmed" demand responsive response is received, rideshare information that indicates a reserved seat shall be sent to the requestor via the Manage Rideshare Requests subfunction.	USR 2.3.2.5, GGO 4.10.
8.1.2.009	When a "confirmed" demand responsive response is received, an updated vehicle manifest shall be sent to the provider.	USR 2.3.2.5, GGO 4.10.
8.1.2.010	When a "denied" demand responsive response is received, rideshare information that indicates "no seats available" shall be sent to the requestor via the Manage Rideshare Request subfunction.	USR 2.3.2.5, GGO 4.10.
8.1.2.011	Rideshare personnel assignments shall include driver to run.	USR 2.3.4.3
8.1.2.012	Rideshare personnel assignments shall include driver to training course.	GGO 12.10.2
8.1.2.013	Rideshare vehicle assignments shall include vehicle to blocks.	USR 2.3.4.3
8.1.2.014	Rideshare vehicle assignments shall include vehicle to maintenance garage.	Derived
8.1.2.015	Rideshare vehicle assignments shall be determined using rideshare information for special passenger handling and service usage data.	USR 2.3.2.1
8.1.2.016	Rideshare vehicle assignments shall be determined for both publicly owned and privately owned/publicly licensed vehicles.	USR 2.3.2.6
8.1.2.017	Rideshare vehicle assignments shall support demand responsive mode.	SB 46-1
8.1.2.018	When a maintenance request for preventative maintenance on a vehicle is received, the vehicle assignment for the vehicle shall be allocated to a maintenance garage if the minimum required number of vehicles would still be available for normal ridesharing operations.	USR 2.1.3.1.2
8.1.2.019	When a driver indicates that his vehicle has broken down, the vehicle assignment for the failed vehicle shall be allocated to a maintenance garage.	Derived
8.1.2.020	When a driver indicates that his vehicle has broken down, appropriate equipment and personnel shall be assigned to the failed vehicle's location.	USR 2.1.3.1.4

Component					Source
Service	Function	Sub-Function	Requirement		
		8.1.2.02 1	When a driver indicates that his vehicle has broken down, the vehicle assignment for a replacement vehicle shall be allocated to pick-up the stranded passengers and continue the run.		Derived
		8.1.2.022	When a training request for a driver is received, the personnel assignment for the driver shall schedule the driver for the training course if the minimum required number of drivers would still be available for normal ridesharing operations.		GGO 12.10.2
		8.1.2.023	When an incident RESOURCE REQUEST is received, available VEHICLE and PERSONNEL ASSIGNMENTS shall be allocated to the incident in support of law enforcement and/or emergency response agencies.		USR 2.4.4.3,2.4.4.4,2.4
	PRO				
		8.1.6.001	Rideshare Fleet Operating Procedures shall be continuously evaluated, improved and maintained to meet customer demand.		MTCO 10/3/96
	PRR				
		8.1.4.001	Individual daily rideshare route plans shall be determined for all vehicles participating in each daily run.		Derived
		8.1.4.002	Rideshare route plans shall be maintained for up to (TBD) days in advance of the run day.		Derived
		8.1.4.003	The rideshare route plan shall be determined periodically using rideshare offers, reserved rideshare requests and waitlisted rideshare requests.		USR 2.3.2.1,2.3.2.4
		8.1.4.004	The rideshare route plan optimization shall support a strategy of minimizing passenger ride time.		USR 2.3.2.4,2.3.4.2
		8.1.4.005	The rideshare route plan optimization shall support a strategy of maximizing vehicle occupancy.		Derived
		8.1.4.006	The rideshare route plan shall be compliant with Americans with Disabilities Act (ADA) regulations.		Derived
		8.1.4.007	If a waitlisted rideshare request is accommodated in a rideshare route plan, rideshare information (i.e. list of rideshare options) shall be sent to the requestor via the Manage Rideshare Requests subfunction.		Derived
		8.1.4.008	A final rideshare route plan shall be determined the night before the run begins.		Derived

					Source
			8.1.4.009	When the final rideshare route plan is completed, rideshare information (i.e. passenger manifest) and rideshare provider information (i.e. vehicle manifest) shall be generated.	GGO 4.5.1,4.10.1
			8.1.4.010	Rideshare route plans shall support transfers between demand responsive and fixed route vehicles.	Derived
		RSO			
			8.1.3.001	Rideshare offers for paratransit commercial operators shall be maintained.	USR 1.4.3.3
			8.1.3.002	Rideshare offers for Vanpools, express bus, bus, rail and taxis shall be maintained.	USR 1.4.2.4, 1.4.3.3
			8.1.3.004	Rideshare offers shall include the number of seats available in the rideshare vehicle.	SB 73-4
			8.1.3.005	Rideshare offers for single trip carpools shall include origin and destination checkpoints.	SB 73-3
			8.1.3.006	Rideshare providers profile information shall be maintained for each provider.	Derived
			8.1.3.007	Manage Rideshare Request functions shall only be made available to transit providers that are authenicated by the ridesharing Authorized Provider List.	Derived
			8.1.3.008	Upon receipt of an Authorized Provider List, the list shall be saved for user authentication.	Derived
	RSR				
		DRI			
			8.2.3.001	When Rideshare Information indicating a confirmed rideshare request is received, the transit user shall be contacted and provided with Trip Itinerary listing departure and arrival times, along with times associated with any intermediate stops.	USR 2.3.1.3
			8.2.3.002	When Rideshare Information indicating a confirmed rideshare request is received, the transit user shall be contacted and provided with Provider Information (e.g. driver name, vehicle license number).	USR 1.4.0
			8.2.3.003	Schedule Adherence Information shall be used to compute the additional time it will take for the rideshare vehicle to arrive at the transit user departure point. When this time matches the timeout period listed in the transit User Profile, an imminent arrival notification (Rideshare Information) shall be sent to the transit user.	USR 2.3.1.4
			8.2.3.004	Mode Use Information data shall be maintained.	

		8.2.3.005	Mode Use Information shall include rideshare program data about registration for and access to ride matching and reservation services.	USR 1.1 .l. 1.6,2.2.3.2.2.
		8.2.3.006	Mode Use Information shall include transit provider information.	MnA 6.2.3, USR 1.4.0,
		8.2.3.007	Mode Use Information shall include security information (e.g. driver and vehicle identification).	GGO 4.5.3
		8.2.3.008	When RIDESHARE INFORMATION indicates an available ride for a waitlisted request, the transit user shall be contacted and notified about the available ride.	Derived
		8.2.3.009	When RIDESHARE INFORMATION indicates an available ride for a waitlisted request, the RIDESHARE INFORMATION (i.e. rideshare options) shall be passed to the Manage Rider Requests subfunction to enable the user to select an available option.	Derived
		8.2.3.010	Mode Use Information shall be made available to any user.	

RRQ

		8.2.2.001	RIDESHARE REQUEST information shall be collected from the transit user to allow the user to request a specific rideshare trip itinerary.	
		8.2.2.002	RIDESHARE REQUEST information shall include Trip Date.	USR 1.4.1.2
		8.2.2.003	RIDESHARE REQUEST information shall include Trip Frequency (e.g. daily, weekly, monthly)	Sbus 74-1
		8.2.2.004	RIDESHARE REQUEST information shall include Time of pick-up.	USR 1.4.1.2, 2.3.1.1
		8.2.2.005	RIDESHARE REQUEST information shall include Time of drop-off,	USR 1.4.1.2, 2.3.1.1
		8.2.2.006	RIDESHARE REQUEST information shall include Trip Origin.	USR 1.4.1.2, 2.3.1.1
		8.2.2.007	RIDESHARE REQUEST information shall include Trip Destination.	USR 1.4.1.2, 2.3.1.1
		8.2.2.008	RIDESHARE REQUEST information shall include Rider Constraints (e.g. handicap access).	USR 1.4.1.2,2.3.1.2
		8.2.2.009	The transit user shall be permitted to submit a RIDESHARE REQUEST to obtain information about available single trips.	USR 1.4.1.1
		8.2.2.010	The transit user shall be permitted to submit a standing RIDESHARE REQUEST to obtain information about available daily, weekly or monthly trips.	Sbus 74-1

8.2.2.011	The transit user shall be permitted to suspend a standing RIDESHARE REQUEST when the user has a change in travel plans.	Sbus 74- 1
8.2.2.012	The transit user shall be permitted to submit RIDESHARE REQUESTs via telephone, mail, or personally owned computer equipment.	Sbus 43-4
8.2.2.0 13	The transit user shall be permitted to submit a RIDESHARE REQUEST to reserve a seat for a single trip, daily trip, weekly trip or monthly trip.	Sbus 43-4
8.2.2.014	Rideshare requests shall be passed to Manage Rideshare Offers subfunction to obtain rideshare information (i.e. rideshare options) that meet the rideshare request criteria.	Derived
8.2.2.015	When rideshare information is received, it shall be forwarded to the transit user via the user's preferred delivery method (i.e. computer, mail).	Derived
8.2.2.016	When a transit user submits a telephone or computer generated rideshare request for a single trip reservation, real-time rideshare information shall be provided while the transit user is connected to the ride matching and reservations service.	Derived
8.2.2.017	The transit user shall be provided with the capability to either wait for real-time RIDESHARE INFORMATION, or to disconnect and have the service contact him with the information when it becomes available.	Derived
8.2.2.018	If rideshare information contains no rideshare options, the transit user shall be notified that his rideshare request for a trip reservation will be wait-listed.	Derived
8.2.2.019	If the transit user rejects all of the available rideshare options, the transit user shall be notified that his rideshare request for a trip reservation will be wait-listed.	Derived
8.2.2.020	When updated rideshare information is received for a wait-listed reservation, the rideshare information shall be forwarded to the transit user via the user's preferred delivery method (i.e. telephone, computer, mail).	Derived
8.2.2.021	When a transit user selects an available rideshare option, a RIDESHARE REQUEST for the selected option shall be generated to reserve a seat on the provider's vehicle.	Derived
8.2.2.022	Manage Rideshare Request functions shall only be made available to transit users that are authenticated by the ridesharing Authorized Users List.	USR 3.1.2.5

	8.2.2.023	Upon receipt of an Authorized User List, the list shall be processed for user authentication and retained.	USR 3.1.2.5

TCI

     MTCD

       CTCD

1.1.2.001	Travel conditions source data shall include traffic conditions.	MnE 1.3
1.1.2.002	Travel conditions source data shall include traffic surveillance data.	Derived
1.1.2.003	Travel conditions source data shall include weather conditions.	MnE 1.3
1.1.2.004	Travel conditions source data shall include weather surveillance data.	MnE 1.3
1.1.2.005	Travel conditions source data shall include road surface conditions.	MnE 1.3
1.1.2.006	Travel conditions source data shall include road surface surveillance data.	MnE 1.3
1.1.2.007	Travel conditions source data shall include incident conditions.	MnE 1.3
1.1.2.008	Travel conditions source data shall include planned event information.	MnE 1.3
1.1.2.010	Travel conditions source data shall include transit conditions.	MnE 1.3
1.1.2.0 12	Traffic conditions data shall be collected.	Derived
1.1.2.013	Weather conditions shall be collected.	Derived
1.1.2.017	Road surface conditions shall be collected from other systems.	Derived
1.1.2.018	Incident conditions shall be collected from humans.	Derived
1.1.2.019	Planned event information shall be collected from humans	Derived
1.1.2.020	Planned event information shall be collected from other systems.	Derived
1.1.2.022	Transit conditions shall be collected.	Derived

	Requirement	Source
1.1.2.023	Travel conditions source data shall be accepted for input in to the system via voice.	Derived
1.1.2.024	Travel conditions source data shall be accepted for input in to the system via fax	Derived
1.1.2.025	Travel conditions source data shall be accepted for input into the system via paper copy	Derived
1.1.2.026	Travel conditions source data shall be accepted for input into the system via magnetic medium	Derived
1.1.2.028	Travel conditions source data shall be accepted in the system via manual entry.	Derived
1.1.2.029	Travel conditions source data shall be accepted into the system via electronic entry. (ITS standard format).	Derived
1.1.2.029.a	Travel conditions source data shall be accepted into the system when in NTCIP format.	Derived
1.1.2.029.b	Travel conditions source data shall be accepted into the system when in ITIS BAP format.	Derived
1.1.2.030	Travel conditions source data shall be accepted into the system via electronic entry. (ITS non-standard format)	Derived
1.1.2.031	Travel conditions source data received in a non-standard format shall be converted to standard format.	Derived
1.1.2.032	Travel conditions source data shall be stored and maintained as an operator selectable option.	Derived
1.1.2.033	Travel conditions source data that is no longer active shall be identified.	Derived
1.1.2.034	Travel conditions source data that is no longer active shall be manually deletable.	Derived
1.1.2.035	Travel conditions source data shall be logged upon initial receipt, change, and deletion.	Derived
1.1.2.036	Condition start time shall be assigned when travel conditions source data is generated.	Derived
1.1.2.037	Condition stop time shall be assigned to travel conditions source data.	MnE 2.2,2.6.2, 1.5.3, 1.
1.1.2.038	Expected duration shall be assigned when travel conditions source data is generated.	MnE2.2, 2.6.2, 1.5.3, 1.
1.1.2.039	Weather surveillance data shall be collected.	USR 3.1.2.5

1.1.2.040	Road surface surveillance data shall be collected.	
1.1.2.042	Traffic surveillance data shall be collected.	Derived
1.1.2.044	Incident conditions shall be collected from other systems.	Derived
1.1.2.045	Multiple sources of travel conditions source data shall be compared to improve the accuracy of the data.	Derived
1.1.2.046	Multiple sources of travel conditions source data shall be compared to improve the consistency of the data.	Derived

DBTCTE

1.1.3.004	Travel conditions shall be referenced to a physical location.	MnE 1.1.1, 1.2
1.1.3.005	Travel effects shall be referenced to a physical location.	MnE 1.1.1
1.1.3.007	Link reference model data shall be stored and maintained.	Derived
1.1.3.008	Travel conditions shall include current traffic conditions	USR 5.2.2.1
1.1.3.009	Travel conditions shall include current weather conditions.	USR 5.2.2.1, GGO 10.5.
1.1.3.010	Travel conditions shall include forecasted weather conditions.	MnE 1.1.2, 1.6.1, GGO
1.1.3.011	Travel conditions shall include current road surface conditions.	USR 5.2.2.1
1.1.3.012	Travel conditions shall include forecasted road surface conditions	Derived
1.1.3.013	Travel conditions shall include current incident conditions.	USR 5.2.2.1
1.1.3 .O 14	Travel conditions shall include planned event information	MnE 1.6.1
1.1.3.016	Travel conditions shall include current transit conditions	USR 1.1.2, 1.1.2.1
1.1.3.017	Travel conditions shall include future transit conditions	MnE 2.5,2.6
1.1.3.018	Travel conditions shall be stored and maintained.	Derived

	Requirement	Source
1.1.3.019	Traffic conditions shall include congestion	USR 5.2.2.1, MnE 1.4.1,
1.1.3.020	Traffic conditions shall include freeway data.	USR 5.2.2.1, GGO 1.5.1
1.1.3.021	Traffic conditions shall include traffic speeds	USR 5.2.2.1, USR 1.1.2.
1.1.3.022	Traffic conditions shall include traffic levels (volume and occupancy)	USR 5.2.2.1, MnE 1.4.1,
1.1.3.024	Weather conditions shall include rain.	MnE 1.1, 1.4.1, MnA 1.
1.1.3.025	Weather conditions shall include snow.	MnE 1.1, 1.4.1, MnA 1.
1.1.3.026	Weather conditions shall include fog.	MnE 1.1, 1.4.1, MnA 1.
1.1.3.027	Weather conditions shall include clear weather.	MnE 1.1, 1.4.1, MnA 1
1.1.3.028	Forecast weather conditions shall be maintained.	MnE 1.1.2, 1.6.1,2.5,2.
1.1.3.029	Road surface conditions shall include dry pavement.	MnE 1.1, 1.4.1, MnA 1.
1.1.3.030	Road surface conditions shall include wet pavement.	MnE 1.1, 1.4.1, MnA 1.
1.1.3.031	Road surface conditions shall include flooded pavement	MnE 1.1, 1.4.1, MnA 1.
1.1.3.032	Road surface conditions shall include snow covered pavement	MnE 1.1, 1.4.1, MnA 1.
1.1.3.033	Road surface conditions shall include icy pavement.	MnE 1.1, 1.4.1, MnA 1.
1.1.3.034	Road surface conditions shall include plowed pavement	MnE 1.1, 1.4.1, MnA 1.
1.1.3.035	Road surface conditions shall include salted pavement.	MnE 1.1, 1.4.1, MnA 1.
1.1.3.036	Road surface conditions shall include sanded pavement.	MnE 1.1, 1.4.1, MnA 1.
1.1.3.037	Forecasted road surface conditions shall be maintained.	Derived
1.1.3.038	Planned event information shall include current construction and maintenance.	USR 5.2.2.1, 1.1.2.1.1,

1.1.3.039	Incident conditions shall include dangerous situations and hazards	USR 5.2.2.1, 1.1.2.1.1,
1 .I .3.040	Incident conditions shall include accidents	USR 5.2.2.1, 1.1.2.1.1,
1.1.3.041	Planned event information shall include special events.	USR 5.2.2.1, 1.1.2.1.1,
1.1.3.042	Future planned event information such as future construction and maintenance shall be maintained.	MnE 1.6.1, 2.5,2.5.1,2.
1.1.3.043	Future planned event information such as upcoming special events/event schedules shall be maintained.	MnE 1.6.1,2.5,2.5.1,2.6,
1.1.3.046	Transit conditions shall include estimated arrival times at each transit stop	GGO 1.5.2, MnE 2.3.1,
1.1.3.046.a	Transit conditions shall include estimated departure times from each transit stop	Derived
1.1.3.046.b	Transit conditions shall include transit vehicle schedule status relative to each stop along a route	Derived
1.1.3.047	Transit conditions shall include schedule changes.	GGO 1.5.2, MnE 2.2,2.
1.1.3.048	Transit condtions shall include route changes	GGO 1.5.2, MnE 2.2,2.
1.1.3.049	Transit condtions shall include transfer changes.	GGO 1.5.2, MnE 2.2,2.
1.1.3.050	Transit conditions for various public transit modes including public transit buses shall be determined	USR 1.1.2, 1.1.2.1
1.1.3.053	Future transit conditions shall be maintained	Derived
1.1.3.054	Travel conditions that are no longer active shall be identified.	Derived
1.1.3.055	Travel effects that are no longer active shall be identified.	Derived
1.1.3.056	Travel conditions shall be manually deletable.	Derived
1.1.3.057	Travel effects shall be manually deletable.	Derived
1.1.3.059	Travel effects shall be stored and maintained.	Derived

		Source
1.1.3.060	Travel conditions shall be logged upon initial receipt, change and deletion.	Derived
1.1.3.061	Travel effects shall be logged upon initial receipt, change and deletion.	Derived
1.1.3.062	Agencies shall be able to access travel conditions without having to manually replicate the information.	MnA 1.1.2
1.1.3.068	Travel effects shall be determined based on travel conditions source data.	Derived
1.1.3.068.a	Travel effects shall be determined based on using travel effects rules.	Derived
1.1.3.069	Travel effects shall include delays.	GGO 2.10.3, MnE 1.5.1
1.1.3.070	Travel effects shall include road/ramp closings.	GGO 2.10.3, MnE 1.5.2
1.1.3.071	Travel effects shall include detours.	GGO 2.10.3, MnE 1.5.2
1.1.3.074	Future travel effects shall be determined and maintained, including expected delays.	MnE 1.7, MnE 1.7.1
1.1.3.075	Future travel effects shall be determined and maintained, including planned road/ramp closings.	MnE 1.7, MnE 1.7.1
1.1.3.076	Future travel effects shall be determined and maintained, including planned detours.	MnE 1.7, MnE 1.7.1
1.1.3.077	Travel effects that are no longer active shall be identified.	Derived
1.1.3.079	A capability to enter travel effects rules shall be provided.	Derived
1.1.3.080	Travel effects rules shall include current condition specific rules.	Derived
1.1.3.081	Travel effects rules shall include future/forecast condition specific rules.	Derived
1.1.3.082	Travel effects rules shall be created, stored and updated.	Derived
1.1.3.083	Travel conditions shall be determined using traffic conditions.	Derived
l.1.3.084	Travel conditions shall be determined using weather conditions	Derived
1.1.3.085	Travel conditions shall be determined using road surface conditions.	Derived

	Requirement	Source
1.1.3.086	Travel conditions shall be determined using incident conditions	Derived
1.1.3.087	Travel conditions shall be determined using planned event information.	Derived
1.1.3.089	Travel conditions shall be determined using transit conditions.	Derived
1.1.3.090	Traffic conditions shall be determined using traffic surveillance data.	Derived
1.1.3.091	Traffic conditions shall include arterial data.	Derived
1.1.3.092	Weather conditions shall be determined using weather surveillance data.	Derived
1.1.3.093	Road surface conditions shall be determined using road surface surveillance data.	Derived
1.1.3.095	Traffic conditions shall include road segment travel time.	Derived
1.1.3.096	Traffic conditions shall include signal timing data.	Derived

MTCI

DTCI

	Requirement	Source
1.2.1.011	Travel conditions shall be formatted to the user-specific delivery device.	Derived
1.2.1.012	As a goal, travel conditions will be made available to users 24 hours/day, 7 days/week, 365 days/year.	MnE 1.3.1, 2.4.1, GGO
1.2.1.012.a	Travel conditions shall be made available within the agreed to hours of operation.	Derived
1.2.1.012.b	Travel conditions shall be made available to humans	Derived
1.2.1.912.c	Travel conditions shall be made available to other systems	Derived
1.2.1.021	Travel conditions shall be distributed via electronic transfer to publicly owned computer.	MnE 1.3.3,2.4.3, MnA
1.2.1.027	Travel conditions shall be distributed via communications radio.	MnA 1.1.4
1.2.1.039	Transit travelers shall be notified when a transit vehicle is about to arrive.	USR2.2.1.2.2.1.1,2.3.1.

DTTC

	Requirement	Source
1.2.3.005	Travel conditions shall be received automatically upon occurance of an event.	Derived
1.2.3.006	Travel conditions shall be received automatically upon any change in an event.	Derived
1.2.3.007	Travel conditions shall be received upon the issuing of a travel conditions request.	Derived
1.2.3.024	Travel conditions shall contain active/or forcasted/future conditions.	Derived
1.2.3.025	Forcasted travel conditions shall contain effects of active or forcasted/future conditions.	Derived
1.2.3.027	Travel conditions shall contain conditions descriptions.	Derived
1.2.3.030	Travel conditions information shall be compiled from travel conditions and travel effects for a local service area.	MnE 1.1.1,2.1.1
1.2.3.031	Travel conditions information shall be compiled from travel conditions and travel effects for the metro area.	GGO 1.10.2
1.2.3.034	Travel conditions information shall be compiled from travel conditions and travel effects for multiple counties.	MnE 1.8.1,2.7.1
1.2.3.035	Travel conditions information shall be compiled from travel conditions and travel effects for multiple cities.	MnE 1.8.1,2.7.1
1.2.3.038	Travel conditions information shall be compiled from travel conditions and travel effects for a geographic region.	MnE 1.8,2.7
1.2.3.039	Travel conditions shall be compiled for the current time frame.	MnE 1.1.2, MnA 1.4.1,
1.2.3.040	Travel conditions shall be compiled for the future time frame.	MnE 1.1.2, 1.6.1, .usr 1.
1.2.3.041	Travel conditions shall be compiled for the forecasted time frame.	MnE 1.1.2, 1.6.1,USR 1

DTTE

	Requirement	Source
1.2.2.002	Travel effects shall be received automatically upon the occurrence of an event.	Derived
1.2.2.003	Travel effects shall be received automatically upon any change in an event.	Derived

TFM

Component				Source
Service	**Function**	**Sub-Function**	**Requirement**	

MFO				
	MPT			
		7.2.6.001	A capability to delay connecting vehicle departures shall be provided when travelers with connecting rides are late.	SB 59-4.6
		7.2.6.002	Travelers shall be notified if they missed a travel connection.	MCTO 4/26/96 - 20
	MTA			
		7.2.1.015	When an incident RESOURCE REQUEST is received, available VEHICLE and PERSONNEL ASSIGNMENTS shall be allocated to the incident in support of law enforcement and/or emergency response agencies.	USR 2.4.4.3,2.4.4.4,2.4
	TRS			
		7.2.2.001	Transit vehicle location shall be determined automatically.	USR 2.3.3.1, SB 59.4.1
		7.2.2.002	Transit vehicle location shall be determined to an accuracy of +/- (TBD) meters.	USR 2.1.1.1, SB 59.4.1
		7.2.2.003	Transit vehicle location shall be reported to the transit fleet management facility.	USR 2.3.2.10, SB 59-4.1

TPD

  MTPD

	DR			
		2.1.2.001	A route shall be determined based on route requirements.	MnE 3.2, USR 1.1.3.1.2,
		2.1.2.002	A route shall be determined based on predicted demand on the transportation system by that user.	USR 1.3.4.3.1
		2.1.2.003	Route information shall include total route travel time.	MnE 3.5.3, 3.7.1,4.3.3
		2.1.2.004	Route information shall include total route travel distance.	MnE 3.7.2.
		2.1.2.005	Route information shall include segment travel times.	MnE 3.7.1, 4.3.2
		2.1.2.006	Route information shall include segment travel distances.	MnE 3.7.1, 4.3.2
		2.1.2.007	Route information shall include segment names(streets, roads, highways).	MnE 3.7.1

			Source
	2.1.2.008	Route information shall include estimated arrival time.	MnE 3.7.1
	2.1.2.012	Route information shall include routes highlighted on a map.	MnE 4.3
	2.1.2.012a.	If the travel conditions option is selected in the route requirements, then a route shall be determined using current or forecast travel conditions.	MnE 4.3
	2.1.2.013	If the travel conditions option is selected in the route requirements, then a route shall be determined using travel conditions, including traffic conditions.	USR 1.2.2.1.2.1, GGO 3.
	2.1.2.014	If the travel conditions option is selected in the route requirements, then a route shall be determined using street closures information.	USR 1.2.2.1.2.1, GGO 3.
	2.1.2.015	If the travel conditions option is selected in the route requirements, then a route shall be determined using public transit fleet schedules.	USR 1.2.2.1.2.1, GGO 3.
	2.1.2.016	If the travel conditions option is selected in the route requirements, then a route shall be determined using transit schedule change information.	USR 1.2.2.1.2.1, GGO 3.
	2.1.2.017	If the travel conditions option is selected in the route requirements, then a route shall be determined using transit system status	USR 1.2.2.1.2.1, GGO 3.
	2.1.2.022	If a transit detour is specified in the route requirements, then a route shall be determined that minimizes the schedule impact for that transit route.	Derived
	2.1.2.023	Link reference model data shall be accepted from multiple sources including public agencies.	Derived
	2.1.2.024	Link reference model data shall be accepted from multiple sources including information service providers.	Derived
	2.1.2.025	Link reference model data shall be accepted into the system via manual entry.	Derived
	2.1.2.026	Link reference model data shall be accepted into the system via electronic entry (standard form)	Derived
	2.1.2.027	Link reference model data shall be accepted into the system via electronic entry (non-standard form).	Derived
	2.1.2.028	A link reference model shall be stored and maintained.	**Derived**

Component				Source
Service	**Function**	**Sub-Function**	**Requirement**	
			2.1.2.029 Public transit fleet schedules shall be stored, updated and deleted.	USR2.2.3.1.1
	MTTP			
		DTPD		
			2.2.3.014 Detour routes shall be made available via phone.	MnE 3.6.3
			2.2.3.015 Detour routes shall be made available via computer.	MnE 3.6.3, USR 1.3.4.1
			2.2.3.051 Upon receipt of a detour request, a set of route requirements will be formulated based on the information in the specific request about the transit route and transit stops that are involved.	Derived
			2.2.3.058 A detour request shall consist of origin/destination points	Derived
			2.2.3.059 A detour request shall contain an option to factor in current travel conditions in determining a detour route.	Derived
			2.2.3.060 A detour request shall contain desired arrival time.	Derived
			2.2.3.061 A detour request shall contain the maximum acceptable trip duration time.	Derived